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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,951	03/07/2005	Janne Muhonen	089229.00355	8417

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EXAMINER

CHOO, MUNSOON

ART UNIT	PAPER NUMBER
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2617

NOTIFICATION DATE	DELIVERY MODE
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07/21/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IPGENERALTYC@SSD.COM
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Office Action Summary	Application No. 10/522,951	Applicant(s) MUHONEN, JANNE	
	Examiner MUNSOON CHOO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/02/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, with regards to claim(s) 29, 41-42, 53 and 57 are filed on April 21, 2010 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

2. In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, Examiner very kindly directs the Applicant to Hanson, fig. 1 ref 30, fig. 4 ref 313, fig. 5 ref 505, 507, 541, C3 L7-21, C3 L50-67, C4 L1-12, C4 L40-45, that:

determining an elapsed time since a last known location of the mobile station was

determined (Col. 4, lines 1-5: see "elapsed time since the most recent registration"); **a**

calculator (fig. 5 ref 505: see "minus", thus teaches calculator);

comparing the elapsed time to a threshold time limit (Col. 4, lines 1-12: see "elapsed time since the most recent registration exceeds a fourth threshold", note that fourth threshold is the threshold time limit); **and in response to the comparing:**

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a) **if the elapsed time is within the threshold time limit** (fig. 5, ref 505, 507: “no” means the elapsed time is “within”/“less than” the threshold), **providing, to the application, as the current location, the last known location** (C3 L50-62: “CDN” controls the process in fig. 5, and provides the location(s) to the application, see fig. 1 ref 30 with ‘Data table, previous/new cell (location)’; fig. 5 ref 505, 507: see “new registration cell is paged”, wherein said new registration cell is new/current/”last known”/”most recently known”, and C3 L50-62: see “MTU is close to the cell where it was most recently found”, thus teaches that the “current location”/“new registration cell” is the “last known location”/”MTU is anticipated to be close to the cell where it was most recently found”; C4 L40-45: if elapse time < threshold, then MTU is near its previous location), **without contacting the mobile station** (C3 L50-62: the current location has been “anticipated”/”without contacting...” to be “close to”/”similar to”/”equal to” the last known location); **a register** (fig. 1: mobile switching center; MSC/VLR; note, see current case (US 20060128395), P [21]-[22] for “MSC/VLR (or SGSN)” and “visitor location register”);

b) **if the elapsed time is not within the threshold time limit** (fig. 5 ref 505 and 541: elapsed time is longer/greater than threshold), **determining a current location of the mobile station** (fig. 5 ref 541: new/current registration cell number/location is “compared.../known/determined”; fig. 4: see “new/current registration cell 313”, wherein mobile station is in said cell location) **and providing to the application, as the current location, the obtained current location** (fig. 1 ref 30: the obtained new/current “cell/location” has been provided to the “application/data table”);

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However, Hanson doesn't specifically disclose: an application configured to provide location dependent services and to generate a location request for an user equipment; receiving at a "network element"/"apparatus", a request for a current location of a mobile station in a mobile communication system, the request being received from an application configured to provide location dependent services; in an analogous field of endeavor, Fujii teaches: **an application configured to provide location dependent services and to generate a location request for an user equipment** (Fujii, fig. 9: see "third-party search request" and "current location: Yokohama"; fig. 5: application); **receiving at a "network element"/"apparatus"** (Fujii, fig. 9: request is received at "ref S43" where password is being matched; P [31], [35]: mobile terminal receives request from third person), **a request for a current location of a mobile station in a mobile communication system** (Fujii, fig. 9: see "third-party search request" and "current location: Yokohama"; P [31], [35]: mobile terminal receives request from third person), **the request being received from an application configured to provide location dependent services** (Fujii, fig. 4: application shows map or location service; fig. 9 ref s45-s46: see "transmit position set by user");

It would be obvious to one of ordinary skill in the art to modify Hanson with a third person transmitting a location request to the mobile terminal **and to receive a current location of said mobile terminal** as taught by Fujii, thereby will prevent abuse of the position search service in response to a position search request from a malicious third person, which could result in an inversion of privacy as discussed by Fujii (P [8]).

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One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **29-32, 34-45, 47-53, 55-60, and 62-72** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanson (6023624) in view of Fujii (US 20030008672 A1).

Consider **Claims 29, 41, 42, 53, and 57**, Hanson teaches a method comprising:

determining an elapsed time since a last known location of the mobile station was determined (Col. 4, lines 1-5: see “elapsed time since the most recent registration”); **a calculator** (fig. 5 ref 505: see “minus”, thus teaches calculator);

comparing the elapsed time to a threshold time limit (Col. 4, lines 1-12: see “elapsed time since the most recent registration exceeds a fourth threshold”, note that fourth threshold is the threshold time limit); **and in response to the comparing:**

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a) **if the elapsed time is within the threshold time limit** (fig. 5, ref 505, 507: “no” means the elapsed time is “within”/“less than” the threshold), **providing, to the application, as the current location, the last known location** (C3 L50-62: “CDN” controls the process in fig. 5, and provides the location(s) to the application, see fig. 1 ref 30 with ‘Data table, previous/new cell (location)’; fig. 5 ref 505, 507: see “new registration cell is paged”, wherein said new registration cell is new/current/”last known”/”most recently known”, and C3 L50-62: see “MTU is close to the cell where it was most recently found”, thus teaches that the “current location”/“new registration cell” is the “last known location”/”MTU is anticipated to be close to the cell where it was most recently found”; C4 L40-45: if elapse time < threshold, then MTU is near its previous location), **without contacting the mobile station** (C3 L50-62: the current location has been “anticipated”/”without contacting...” to be “close to”/”similar to”/”equal to” the last known location); **a register** (fig. 1: mobile switching center; MSC/VLR; note, see current case (US 20060128395), P [21]-[22] for “MSC/VLR (or SGSN)” and “visitor location register”);

b) **if the elapsed time is not within the threshold time limit** (fig. 5 ref 505 and 541: elapsed time is longer/greater than threshold), **determining a current location of the mobile station** (fig. 5 ref 541: new/current registration cell number/location is “compared.../known/determined”; fig. 4: see “new/current registration cell 313”, wherein mobile station is in said cell location) **and providing to the application, as the current location, the obtained current location** (fig. 1 ref 30: the obtained new/current “cell/location” has been provided to the “application/data table”);

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However, Hanson doesn't specifically disclose: an application configured to provide location dependent services and to generate a location request for an user equipment; receiving at a "network element"/"apparatus", a request for a current location of a mobile station in a mobile communication system, the request being received from an application configured to provide location dependent services; in an analogous field of endeavor, Fujii teaches: **an application configured to provide location dependent services and to generate a location request for an user equipment** (Fujii, fig. 9: see "third-party search request" and "current location: Yokohama"; fig. 5: application); **receiving at a "network element"/"apparatus"** (Fujii, fig. 9: request is received at "ref S43" where password is being matched; P [31], [35]: mobile terminal receives request from third person), **a request for a current location of a mobile station in a mobile communication system** (Fujii, fig. 9: see "third-party search request" and "current location: Yokohama"; P [31], [35]: mobile terminal receives request from third person), **the request being received from an application configured to provide location dependent services** (Fujii, fig. 4: application shows map or location service; fig. 9 ref s45-s46: see "transmit position set by user");

It would be obvious to one of ordinary skill in the art to modify Hanson with a third person transmitting a location request to the mobile terminal **and to receive a current location of said mobile terminal** as taught by Fujii, thereby will prevent abuse of the position search service in response to a position search request from a malicious third person, which could result in an inversion of privacy as discussed by Fujii (P [8]).

Consider **Claims 30, 43, and 58**, Hanson teaches:

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determining a current location of the mobile station if the time is not within the threshold limit (flood paging, Col. 4, line 5 and Fig. 5, Block 521); and providing, as the current location, the obtained current location (Col. 2, lines 7-19).

Consider **claims 31, 44, and 59**, Hanson teaches: wherein the comparing the time to the threshold time limit is dependent upon the status of the mobile station (registered, Col. 4, line 2).

Consider **Claims 32, 45, and 60**, Hanson teaches: wherein if the mobile station is active the comparing is disabled (initial restrictive paging is enabled, Col. 5, line 36) and a current location is determined for the mobile station (registered, Col. 4, line 2).

Consider **Claims 34, 47, and 62**, Hanson teaches: wherein if a current location is not provided, the last known location is provided as the current location (last registration, Col. 1, line 62).

Consider **Claims 35, 48, and 63**, Hanson teaches: storing the last known location of a mobile station together with a time associated with the last known location (Fig. 1, Data table).

Consider **Claims 36, 49, and 64**, Hanson teaches: storing the threshold time limit (elapsed time, Col. 1, line 65 and Fig. 5).

Consider **Claims 37, 50, 65, and 71**, Hanson teaches: dynamically adjusting the threshold time limit (Fig. 5, Blocks 531, 533, 535, and 505 and Col. 3, lines 50-67, and Col. 4, lines 1-14).

Consider **Claims 38, 51, 66, and 72**, Hanson teaches: wherein the threshold time limit is set by a network operator (Col. 5, lines 29-31).

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Consider **Claims 39, 52, 67, 68, and 69**, Hanson teaches: wherein the threshold limit is included in the request for the current location (Col. 4, lines 1-12).

Consider Claim 40, Hanson teaches: wherein the time is an elapsed time (Col. 1, line 65).

Consider **Claim 55**, Hanson teaches: wherein the system implements a customized applications for mobile network enhanced logic (CAMEL) framework (Figs. 1 and 3-5).

Consider **Claim 56**, Hanson teaches: wherein the system implements location services (Col. 1, lines 56-67, and Col. 2, lines 1-18).

Consider **Claim 70**, Hanson teaches: means for storing the threshold time limit (Figs. 1 and 5, and Col. 3, line 63-Col. 4, line12).

5. **Claims 33, 46, 54, and 61** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanson in view of Fujii and Kallin (US 6058308).

Consider Claims **33, 46, and 61**, Hanson teaches wherein the mobile station has a status (registered, Col. 4, line 2), but does not specifically teach wherein if the status is idle, the comparing is enabled. In an analogous field of endeavor, Kallin teaches wherein if the status is idle (Col. 2, lines 27-31) the comparing step is enabled.

It would be obvious to one of ordinary skill in the art to modify Hanson with the teaching of the mobile terminal is in an idle mode of operation as taught by Kallin, thereby will provide the network of an indication of the position at which the mobile is located as discussed by Kallin (C2 L27-31).

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Consider **Claim 54**, Hanson teaches a mobile communication system wherein the network element for determining the time at which the last known location was determined (fig. 1 ref 30), but does not specifically teach wherein the network element includes a visitor location register. In an analogous field of endeavor, Kallin teaches wherein the network element includes a visitor location register (Col. 2, lines 60-63).

It would be obvious to one of ordinary skill in the art to modify Hanson with a network element or VLR that receives registration report of a mobile as taught by Kallin, thereby will provide the network of an indication of the position at which the mobile is located as discussed by Kallin (C2 L27-31).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MUNSOON CHOO whose telephone number is (571)270-7140, fax number is (571)-270-8140 and email is munsoon.choo@uspto.gov. The examiner can normally be reached on Monday through Friday 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571)272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Munsoon Choo/

Examiner, Art Unit 2617

/KAMRAN AFSHAR/

Primary Examiner, Art Unit 2617